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(3) Each replacement page shall include both a change indicator for the area changed, e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed, and a page change identification (date of change or change number or both);

(4) The update shall include:

(i) A certification by a duly authorized officer of the certificate holder that either the information accurately presents changes made since the previous submittal, or that no such changes were made; and

(ii) An identification of changes made by the certificate holder under the provisions of §72.48, but not previously submitted to the Commission;

(5) The update shall reflect all changes implemented up to a maximum of 6 months prior to the date of filing;

(6) Updates shall be filed every 24 months from the date of issuance of the CoC; and

(7) The certificate holder shall provide a copy of the updated FSAR to each general and specific licensee using its cask design.

(d) The updated FSAR shall be retained by the certificate holder until the Commission terminates the certificate.

(e) A certificate holder who permanently ceases operation, shall provide the updated FSAR to the new certificate holder or to the Commission, as appropriate, in accordance with §72.234(d)(3).

[64 FR 53617, Oct. 4, 1999, as amended at 68 FR 58819, Oct. 10, 2003]

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SOURCE: 38 FR 35430, Dec. 28, 1973, unless otherwise noted.

#### GENERAL PROVISIONS

##### § 73.1 Purpose and scope.

(a) *Purpose.* This part prescribes requirements for the establishment and maintenance of a physical protection system which will have capabilities for the protection of special nuclear material at fixed sites and in transit and of plants in which special nuclear material is used. The following design basis threats, where referenced in ensuing sections of this part, shall be used to design safeguards systems to protect

against acts of radiological sabotage and to prevent the theft of special nuclear material. Licensees subject to the provisions of § 72.182, § 72.212, § 73.20, § 73.50, and § 73.60 are exempt from § 73.1(a)(1)(i)(E) and § 73.1(a)(1)(iii).

(1) *Radiological sabotage.* (i) A determined violent external assault, attack by stealth, or deceptive actions, of several persons with the following attributes, assistance and equipment:

(A) Well-trained (including military training and skills) and dedicated individuals,

(B) inside assistance which may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both,

(C) suitable weapons, up to and including hand-held automatic weapons, equipped with silencers and having effective long range accuracy,

(D) hand-carried equipment, including incapacitating agents and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity or features of the safeguards system, and

(E) a four-wheel drive land vehicle used for transporting personnel and their hand-carried equipment to the proximity of vital areas, and

(ii) An internal threat of an insider, including an employee (in any position), and

(iii) A four-wheel drive land vehicle bomb.

(2) *Theft or diversion of formula quantities of strategic special nuclear material.*

(i) A determined, violent, external assault, attack by stealth, or deceptive actions by a small group with the following attributes, assistance, and equipment:

(A) Well-trained (including military training and skills) and dedicated individuals;

(B) Inside assistance that may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both;

(C) Suitable weapons, up to and including hand-held automatic weapons, equipped with silencers and having effective long-range accuracy;

(D) Hand-carried equipment, including incapacitating agents and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity or features of the safe-guards system;

(E) Land vehicles used for transporting personnel and their hand-carried equipment; and

(F) the ability to operate as two or more teams.

(ii) An individual, including an employee (in any position), and

(iii) A conspiracy between individuals in any position who may have:

(A) Access to and detailed knowledge of nuclear power plants or the facilities referred to in § 73.20(a), or

(B) items that could facilitate theft of special nuclear material (e.g., small tools, substitute material, false documents, etc.), or both.

(b) *Scope.* (1) This part prescribes requirements for:

(i) The physical protection of production and utilization facilities licensed pursuant to part 50 of this chapter,

(ii) The physical protection of plants in which activities licensed pursuant to part 70 of this chapter are conducted, and

(iii) The physical protection of special nuclear material by any person who, pursuant to the regulations in part 61 or 70 of this chapter, possesses or uses at any site or contiguous sites subject to the control by the licensee, formula quantities of strategic special nuclear material or special nuclear material of moderate strategic significance or special nuclear material of low strategic significance.

(2) This part prescribes requirements for the physical protection of special nuclear material in transportation by any person who is licensed pursuant to the regulations in parts 70 and 110 of this chapter who imports, exports, transports, delivers to a carrier for transport in a single shipment, or takes delivery of a single shipment free on board (F.O.B.) where it is delivered to a carrier, formula quantities of strategic special nuclear material, special nuclear material of moderate strategic

significance or special nuclear material of low strategic significance.

(3) This part also applies to shipments by air of special nuclear material in quantities exceeding: (i) 20 grams or 20 curies, whichever is less, of plutonium or uranium-233, or (ii) 350 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope).

(4) Special nuclear material subject to this part may also be protected pursuant to security procedures prescribed by the Commission or another Government agency for the protection of classified materials. The provisions and requirements of this part are in addition to, and not in substitution for, any such security procedures. Compliance with the requirements of this part does not relieve any licensee from any requirement or obligation to protect special nuclear material pursuant to security procedures prescribed by the Commission or other Government agency for the protection of classified materials.

(5) This part also applies to the shipment of irradiated reactor fuel in quantities that in a single shipment both exceed 100 grams in net weight of irradiated fuel, exclusive of cladding or other structural or packaging material, and have a total radiation dose in excess of 100 rems per hour at a distance of 3 feet from any accessible surface without intervening shielding.

(6) This part prescribes requirements for the physical protection of spent nuclear fuel and high-level radioactive waste stored in either an independent spent fuel storage installation (ISFSI) or a monitored retrievable storage (MRS) installation licensed under part 72 of this chapter, or stored at the geologic repository operations area licensed under part 60 or part 63 of this chapter.

(7) This part prescribes requirements for the protection of Safeguards Information in the hands of any person, whether or not a licensee of the Commission, who produces, receives, or acquires Safeguards Information.

(8) This part prescribes requirements for advance notice of export and import shipments of special nuclear material, including irradiated reactor fuel.

(9) As provided in part 76 of this chapter, the regulations of this part establish procedures and criteria for physical security for the issuance of a certificate of compliance or the approval of a compliance plan.

[44 FR 68186, Nov. 28, 1979, as amended at 45 FR 67645, Oct. 14, 1980; 45 FR 80271, Dec. 4, 1980; 46 FR 51724, Oct. 22, 1981; 47 FR 57482, Dec. 27, 1982; 52 FR 9653, Mar. 26, 1987; 53 FR 31683, Aug. 19, 1988; 53 FR 45451, Nov. 10, 1988; 59 FR 38899, Aug. 1, 1994; 59 FR 48960, Sept. 23, 1994; 63 FR 26962, May 15, 1998; 66 FR 55816, Nov. 2, 2001]

### § 73.2 Definitions.

As used in this part:

(a) Terms defined in parts 50 and 70 of this chapter have the same meaning when used in this part.

*Appropriate Nuclear Regulatory Commission Regional Office listed in appendix A* means:

(1) For domestic shipments—the Regional Office within whose region the licensee who is responsible for the physical protection arrangements of the shipment is located.

(2) For export shipments—the Regional Office within whose region the licensee who is responsible for the physical protection arrangements of the shipment is located, and the Regional Office for the region in which the last point of exit of the shipment from the U.S. is located.

(3) For import shipments—the Regional Office within whose region the licensee who is responsible for the physical protection arrangements of the shipment is located, and the Regional Office for the region in which the first point of entry of the shipment into the U.S. is located.

*Armed escort* means an armed person, not necessarily uniformed, whose primary duty is to accompany shipments of special nuclear material for the protection of such shipments against theft or radiological sabotage.

*Armed response personnel* means persons, not necessarily uniformed, whose primary duty in the event of attempted theft of special nuclear material or radiological sabotage shall be to respond, armed and equipped, to prevent or delay such actions.

*Authorized individual* means any individual, including an employee, a stu-

dent, a consultant, or an agent of a licensee who has been designated in writing by a licensee to have responsibility for surveillance of or control over special nuclear material or to have unescorted access to areas where special nuclear material is used or stored.

*Bullet/resisting* means protection against complete penetration, passage of fragments of projectiles, and spalling (fragmentation) of the protective material that could cause injury to a person standing directly behind the bullet-resisting barrier.

*Contiguous sites* means licensee controlled locations, deemed by the Commission to be in close enough proximity to each other, that the special nuclear material must be considered in the aggregate for the purpose of physical protection.

*Continuous visual surveillance* means unobstructed view at all times of a shipment of special nuclear material, and of all access to a temporary storage area or cargo compartment containing the shipment.

*Controlled access area* means any temporarily or permanently established area which is clearly demarcated, access to which is controlled and which affords isolation of the material or persons within it.

*Deceit* means methods used to attempt to gain unauthorized access, introduce unauthorized materials, or remove strategic special nuclear materials, where the attempt involves falsification to present the appearance of authorized access.

*DOE and Department of Energy* means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95–91, 91 Stat. 565, 42 U.S.C. 7101 *et seq.*), to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104(b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93–438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of